

1,2-DICHLOROPROPANE

Also known as: Propylene dichloride, Dichloropropane
Chemical reference number (CAS): 78-87-5

WHAT IS 1,2-DICHLOROPROPANE?

1,2-Dichloropropane (dichloropropane) is a colorless, flammable solvent that evaporates quickly at room temperature. It's used as degreaser and dry cleaning fluid. Previously it was used as an insecticide. Dichloropropane is not found in household products.

Dichloropropane is flammable. Keep the liquid and its vapors away from sparks and open flames.

When dichloropropane enters the environment, it can seep into the groundwater or evaporate into the air.

HOW ARE PEOPLE EXPOSED TO 1,2-DICHLOROPROPANE?

Breathing: People can be exposed to dichloropropane when they breathe contaminated air. Workplace exposure typically occurs from contaminated air. If people have contaminated drinking water, they may also be exposed when they use the water to bathe, launder, or prepare food.

Drinking/Eating: This chemical can enter the body when people drink contaminated water. Garden plants grown in contaminated soil do not take up dichloropropane.

Touching: Dichloropropane can pass through the skin when people touch the chemical itself or contaminated soil or water.

DO STANDARDS EXIST FOR REGULATING 1,2-DICHLOROPROPANE?

Water: The state and federal drinking water standards for dichloropropane are both set at 5 parts per billion (ppb). We recommend you stop drinking water containing more than 5 ppb of dichloropropane. If the level of dichloropropane is higher than 60 ppb in your water, you should avoid washing, bathing, or using the water for other purposes. Contact your local public health agency for more information specific to your situation.

Air: No standards exist for the amount of dichloropropane allowed in the air of homes. We use a formula to convert workplace limits to home limits. Based on the formula, we recommend levels of dichloropropane in air be no higher than 1.5 parts per million (ppm). Most people can smell dichloropropane when the level reaches 0.25 ppm.

The Wisconsin Department of Natural Resources regulates the amount of dichloropropane that can be released by industries.

WILL EXPOSURE TO 1,2-DICHLOROPROPANE RESULT IN HARMFUL HEALTH EFFECTS?

The following symptoms may occur immediately or shortly after exposure to high levels of dichloropropane in air:

- Irritation of the eyes, throat, and nose; and
- Headaches, nausea, and dizziness.

The following health effects can occur after several years of exposure to dichloropropane:

Cancer: Experiments on animals show liver tumors following exposure to dichloropropane. Based on this information, the Environmental Protection Agency (EPA) has classified dichloropropane as a probable human carcinogen.

Reproductive Effects: Animal experiments show exposure to this compound affects the testes and decreases male fertility.

Organ Systems: Liver, kidney, and brain damage can result from repeated, high level exposure.

In general, chemicals affect the same organ systems in all people who are exposed. However, the seriousness of the effects may vary from person to person. A person's reaction depends on several things, including individual health, heredity, previous exposure to chemicals including medicines, and personal habits such as smoking or drinking.

It is also important to consider the length of exposure to the chemical; the amount of chemical exposure; and whether the chemical was inhaled, touched, or eaten.

CAN A MEDICAL TEST DETERMINE EXPOSURE TO 1,2-DICHLOROPROPANE?

For those individuals with frequent or potentially high level exposures, the following medical tests may be appropriate:

- Liver and kidney function tests,
- Neurological examinations, and
- Evaluation of male fertility status.

Any evaluation should include a careful history of past and present symptoms.

Seek medical advice if you have any symptoms that you think may be related to chemical exposure.

This fact sheet summarizes information about this chemical and is not a complete listing of all possible effects. It does not refer to work exposure or emergency situations.

FOR MORE INFORMATION

- Poison Control Center, 800-815-8855
- Your local public health agency
- Division of Public Health, BEH, 1 West Wilson Street, Rm. 150, Madison, WI 53701-2659, (608) 266-1120 or Internet: <http://www.dhfs.state.wi.us/eh>



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